

REMARKS

Claims 17-19, 27, and 42-48 are pending in the application. Claims 17, 27, 42 and 45-48 stand rejected as being anticipated by Lambrecht et al. (2002/151979), claims 18 and 43 stand rejected as being unpatentable over Lambrecht et al. (2002/151979) in view of Muhanna (6936070), and claims 19 and 44 stand rejected as being unpatentable over Lambrecht et al. (2002/151979) in view of Sybert et al. (2002/107570). For the reasons set forth below, favorable reconsideration of the application is respectfully requested.

Applicant's pending claims are directed to a method and device for augmenting the nucleus of an intervertebral disc. The device comprises a braided natural tissue implant having a first end and a second end, and a drawstring secured near the first end of said braided tissue implant and passing through said implant at a multiplicity of sites from the first end to the second end, wherein the drawstring is effective for folding the braided natural tissue to a folded configuration after implantation of the tissue in a disc nucleus space. The method comprises implanting in an intervertebral disc an intervertebral disc device comprising a length of braided natural tissue that has been provided with a drawstring effective for folding the length of natural tissue to a folded configuration after implantation of the tissue in a disc nucleus space, and pulling the drawstring to fold the length of natural tissue.

The cited Lambrecht reference also discloses a device for implantation in a disc nucleus, but the Lambrecht device does not appear to include a drawstring effective for folding the braided natural tissue to a folded configuration after implantation of the tissue in a disc nucleus space. Instead, the Lambrecht device includes one or more "control

filaments” that are used to maneuver, but not to fold, the Lambrecht implant. In particular, the Lambrecht device uses one or more control filaments to pull the Lambrecht implant into a desired implant location, such as along the inner aspect of the annulus where the implant can cover the annulotomy opening. The Lambrecht reference does not appear to disclose using the control filament to fold the Lambrecht implant, nor would the Lambrecht control filament appear to be effective for that purpose.

The specification of the Lambrecht reference discloses how the Lambrecht control filament is used. For example, at paragraphs 207-208 it is disclosed that:

Once the implant 400 is completely outside of the delivery cannula 402 and within the disc 15, the implant 400 can be pulled into the desired implant location by pulling on the control filament 406 as shown in FIG. 49C.

* * *

Pulling on the control filament 406 causes the implant 400 to move toward the annulotomy 416. . . . Further pulling on the control filament 406 causes the proximal end 426 of the implant 400 to dissect along the inner aspect of the anulus 20 until the attachment site 414 or sites of the guide filament 406 to the implant 400 has been pulled to the inner aspect of the annulotomy 416, as shown in FIG. 49D. In this way, the implant 400 will extend at least from the annulotomy 416 and along the inner aspect of the anulus 10 in the desired implant location, illustrated in FIG. 49F.

Similarly, at paragraphs 214-15 the Lambrecht reference states:

Multiple guide filaments can be secured to the implant 400 at various locations. . . . This double guide filament system allows the implant 400 to be positioned in the same manner described above in the single filament technique, and illustrated in FIGS. 50A-C. However, following completion of this first technique, the user may advance the proximal end 420 of the device 400 across the annulotomy 416 by pulling on the second guide filament 424, shown in FIG. 50D.

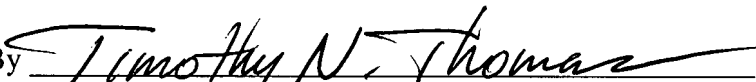
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Both the first 422 and second 424 guide filaments can be simultaneously tensioned, as shown in FIG. 50E, to ensure proper positioning of the implant 400 within the anulus 10. Once the implant 400 is placed across the annulotomy, the first 422 and second 424 guide filaments can be removed from the input 400, as shown in FIG. 50F. Additional control filaments and securing sites may further assist implantation and/or fixation of the intradiscal implants.

It can be seen from the above that Lambrecht fails to teach or suggest a device having a drawstring secured near the first end of said braided tissue implant and passing through said implant at a multiplicity of sites from the first end to the second end, wherein the drawstring is effective for folding the braided natural tissue to a folded configuration after implantation of the tissue in a disc nucleus space. Moreover, the Lambrecht reference fails to teach or suggest implanting into a disc nucleus space a length of braided natural tissue that has been provided with a drawstring effective for folding the length of natural tissue to a folded configuration after implantation into the disc nucleus space, and pulling the drawstring to fold the length of natural tissue.

In view of the above, it is respectfully submitted that the cited reference fails to teach or suggest applicant's claimed invention. Accordingly, the application is believed to be in a condition for allowance. Favorable consideration of the amended application is respectfully requested.

Respectfully submitted,

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